UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,512	03/30/2004	John Anderson Campbell	EMC04-04(04029)	3214

22468 7590 12/12/2006	EXAMINER	
CHAPIN & HUANG L.L.C.	PANNALA, SATHYANARAYA R	
WESTBOROUGH OFFICE PARK		
1700 WEST PARK DRIVE	ART UNIT	PAPER NUMBER
WESTBOROUGH, MA 01581	2164	

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>30 March 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,13-21 and 28-31* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,13-21 and 28-31* is/are rejected.

7)☐ Claim(s) *7-12, 22-27* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   Application No. 10/812512 filed on 3/30/2004 has been examined. In this Office

Action, claims 1-31 are pending.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
>
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
>
> the prior art are such that the subject matter as a whole would have been obvious at the time the
>
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
>
> Patentability shall not be negatived by the manner in which the invention was made.

> This application currently names joint inventors. In considering patentability of the claims under 35
>
> U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly
>
> owned at the time any inventions covered therein were made absent any evidence to the contrary.
>
> Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates
>
> of each claim that was not commonly owned at the time a later invention was made in order for the
>
> examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior
>
> art under 35 U.S.C. 103(a).

3.   Claims 1-6, 16-21 and 31 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Zahavi et al. (US Patent 6,886,020) hereinafter Zahavi, and in view of

Therrien et al. (USPA Pub. 2004/0093361A1) hereinafter Therrien.

4.   As per independent claims 1, 16 and 31, Zahavi teaches a data management

and archive method and apparatus, such as for implementation in an automated system

to monitor and manage status, performance and configuration data for a plurality of

networked storage components (col. 4, lines 63-67). Zahavi teaches the claimed,

receiving a data collection policy identifying storage information to be collected

concerning a set of storage entities in the storage area network environment (Fig. 3,

col. 5, lines 61-65). Zahavi teaches the claimed, collecting storage information

concerning the set of storage entities according to the data collection policy (Fig. 3,

col. 5, line 66 to col. 6, line 2).

Zahavi does not explicitly teach producing a summary report on storage.

However, Therrien teaches the claimed, processing the collected storage information to

produce at least one summary record of the storage information for the set of storage

entities, the at least one summary record containing a summary of the collected storage

information for the set of storage entities calculated according to the data collection

policy and transferring the at least one summary record from the data collection agent to

a storage management application for presentation to a user of the storage

management application (Fig. 8, page 6, paragraph [0067]). Thus, it would have been

obvious to one of ordinary skill in the data processing art at the time of the invention, to

combine the teachings of the cited references because Therrien's teachings would have

allowed Zahavi's method of storage resources sharing by many applications in a

secured manner would increase overall utilization to 80-90% (page 1, paragraph

[0006]).

Zahavi also teaches other limitations of claim 16 are as: a network interface and

a storage interface (Fig.2, col. 4, lines 61-65), a processor and a memory system (Fig.2,

col. 5, lines 1-5). Interconnection mechanism (Fig.2).

5.   As per dependent claims 2, 17, Zahavi teaches the claimed, receiving a data

collection policy comprises: receiving a collection level identifying a set of files

corresponding to the set of storage entities from which storage information is to be

collected and receiving a collection period value indicating how often to perform

collection of the storage information concerning the set of storage entities (Fig. 3, col. 6,

lines (29-34).

6.   As per dependent claims 3, 18, Zahavi teaches the claimed, receiving a

collection level corresponding to the set of storage entities from which storage

information is to be collected comprises: receiving at least one of a host collection level,

a file system collection level and a file set collection level and based on the collection

level, identifying, as the set of storage entities, a set of file systems containing at least

one file from which storage information is to be collected (Fig. 7, col. 7, lines 28-32).

7.   As per dependent claims 4, 19, Zahavi teaches the claimed, receiving a

collection level comprises: receiving a selection of a host collection level identifying at

least one host computer system that maintains access to a set of file systems from

which storage information is to be collected and identifying, as the set of storage entities

from which storage information is to be colleted, files within a set of file systems

accessible within data storage systems associated with the at least one host computer

system identified by the host collection level (Fig. 3, col. 5, line 66 to col. 6, line 2).

8.   As per dependent claims 5, 20, Zahavi teaches the claimed, receiving a

collection level comprises: receiving a selection of a file system collection level

identifying at least one file system that maintains access to the set of files from which

storage information is to be collected and identifying, as the set of storage entities from

which storage information is to be colleted, files within the identified at least one file

system corresponding to the file system collection level (Fig. 5, col. 6, lines 47-49).

9.   As per dependent claims 6, 21, Zahavi teaches the claimed, receiving a

collection level comprises: receiving a selection of a file set collection level identifying at

least one specific file from which storage information is to be collected, the selected at

least one specific file indicating the set of storage entities from which storage

information is to be collected (Fig. 3, col. 5, lines 34-35).

10.   Claims 13-15, 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Zahavi et al. (US Patent 6,886,020) hereinafter Zahavi, in view of Therrien et al.

(USPA Pub. 2004/0093361 A1) hereinafter Therrien, and in view of Gusher et al. (US

Patent 6,938,057) hereinafter Gusher.

11.   As per dependent claims 13, 28, Zahavi and Therrien combined teach claims 1

and 16. Zahavi and Therrien do not teach getting files sizes and ages. However,

Gusher teaches the claimed, the data collection policy received defines a host collection

level and wherein collecting storage information concerning the set of storage entities

according to the data collection policy comprises: for each host defined by the host

collection level, collecting storage information related to the sizes and ages of files and

directories within file systems accessible to that host and wherein processing the

collected storage information to produce at least one summary record of the storage

information for the set of storage entities comprises: for each host defined by the host

collection level, producing a size summary record and an age summary record by

applying averaging functions to the storage information related to the sizes and ages of

files and directories within file systems accessible to that host (Fig. 3-4, 7,   col. 1, lines

32-35; col. 6, lines 6-9; col. 5, lines 48-49 and col. 8, lines 10-16). Thus, it would have

been obvious to one of ordinary skill in the data processing art at the time of the

invention, to have combined the teachings of the cited references because Gusher's

teachings would have allowed Zahavi's method to provide an effective system for

backing up computers in a network (col. 1, lines 61-63).

12.   As per dependent claims 14, 29, Zahavi and Therrien combined teach claims 1

and 16. Zahavi and Therrien do not teach getting files sizes and ages. However,

Gusher teaches the claimed, the data collection policy received defines a file system

collection level and wherein collecting storage information concerning the set of storage

entities according to the data collection policy comprises: for each file system defined by

the file system collection level, collecting storage information related to the sizes and

ages of files and directories within that file system and wherein processing the collected

storage information to produce at least one summary record of the storage information

for the set of storage entities comprises: for each file system defined by the file system

collection level, producing a size summary record and an age summary record by

applying averaging functions to the storage information related to the sizes and ages of

files and directories within that file system (Fig. 3-4, 7, col. 1, lines 32-35; col. 6,

lines 6-9; col. 5, lines 48-49 and col. 8, lines 10-16). Thus, it would have been obvious

to one of ordinary skill in the data processing art at the time of the invention, to have

combined the teachings of the cited references because Gusher's teachings would have

allowed Zahavi's method to provide an effective system for backing up computers in a

network (col. 1, lines 61-63).

13.   As per dependent claims 15, 30, Zahavi and Therrien combined teach claims 1

and 16. Zahavi and Therrien do not teach getting files sizes and ages. However,

Gusher teaches the claimed, the data collection policy received defines a file set

collection level indicating a specific set of files for which storage information is to be

collection and wherein collecting storage information concerning the set of storage

entities according to the data collection policy comprises for each file defined by the file

set collection level, collecting storage information related to the size and age of that file

and wherein processing the collected storage information to produce at least one

summary record of the storage information for the set of storage entities comprises: for

all files defined by the file set collection level, producing a size summary record and an

age summary record by applying averaging functions to the storage information related

to the sizes and ages of the files identified by the file set collection level (Fig. 3-4, 7,

col. 1, lines 32-35; col. 6, lines 6-9; col. 5, lines 48-49 and col. 8, lines 10-16). Thus, it

would have been obvious to one of ordinary skill in the data processing art at the time of

the invention, to have combined the teachings of the cited references because Gusher's

teachings would have allowed Zahavi's method to provide an effective system for

backing up computers in a network (col. 1, lines 61-63).

Allowable Subject Matter

14.   Claims 7-12 and 22-27 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the

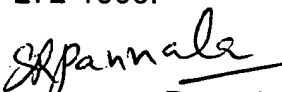limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sathyanarayan Pannala whose telephone number is

(571) 272-4115. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sathyanarayan Pannala
Primary Examiner

srp
December 8, 2006